SBD - CM Review Form

To: Project Review & Analysis - Construction

From: SBD CM - Eddy V. Etienne Jr.

Department: Miami-Dade Water & Sewer Department **Contact:** Isaac Smith (WASD)

Date: 12/1/2015 Resubmittal: No

PROJECT NUMBER: S-890

PROJECT TITLE: CDWWTP Chlorination Facilities Consent Decree Project 2.17

12345 NE 23 CT or Starts at 135 St. ends at 145 St, 3989

PROJECT LOCATION: Rickenbacker Causeway, Virginia Key, FL

SCOPE OF WORK/DESCRIPTION: The scope of work consist of furnishing all materials, labor and equipment necessary for the construction of the Consent Decree Project 2.17, Chlorination Facilities at the Central District Wastewater Treatment Plant (CDWWTP), located in Virginia Key, 3989 Rickenbacker Causeway, Section16, Township 54, Range 42, Miami-Dade County, Florida 33149. The facilities will be a new construction and will replace the existing chlorine gas facilities used for disinfection throughout the plant. The purpose of the facilities will be to provide storage of concentrated liquid sodium hypochlorite and to provide the metering pumps to serve the necessary discharge points throughout the plant.

This project includes the construction of three (3) new buildings, on auger cast pile foundation: two buildings at site 1 and one (1) at Site 2. The Site 1 bulk storage building will not have any roof or walls above elevation 20.3. The Site 1 mechanical electrical building will be completely roofed and will be a split elevation building. Site 2 satellite facilities is smaller and will be open-sided on the tank storage area, and will be roofed and on the mechanical/electrical room. The entire extent of the satellite building will be roofed and will have a monorail system for tank to allow tank removal. The project includes sixteen (16) 20,000 FRP tanks, four (4) 2,500 gallon HDPE tanks, motor operated diaphragm metering pumps, spill containment troughs, spill containment pumps, magnetic drive pumps, installation of variable frequency drives, motor control centers, transformers, low voltage control panels, electrical switchboards, breakers, starters, lighting, grounding and lightning protection.

SPECIAL REQUIREMENTS: Bidders shall demonstrate relevant minimum experience by submitting proof with their bid contract experience as required below:

- Bidder shall be experienced in chemical storage and metering facilities, specifically for sodium hypochlorite applications.
- b. Bidders must have successfully completed the construction and/or rehabilitation of a minimum of three (3) chemical storage and metering facilities within the last ten (10) years.
- c. The Bidder or Bidder's Electrical Subcontractor shall have successfully completed a minimum of three (3) projects demonstrating experience with installation of electrical equipment rated for 480V power supply.

LICENSES: The types of licenses required are: State General Contractor, General Engineering Contractor and/or other categories as applicable by Chapter 489 of the Florida Statutes or Chapter 10 of Miami-Dade County Code.

ı	TEM	TRADES/SUBTRADES	AMOUNT	PERCENT AGE	COMMENTS
A)	1	ERAL SITEWORK - 236210-236220-238910-237310-237990- 10-238190			
	1)	Fencing			
		Fence Removal, Chain Link Fence, Silt Fence	\$7,800.00	0.06%	*Possible Small Business Opportunity
	2)	Asphaltic Concrete Paving	\$43,740.00	0.36%	*Possible Small Business Opportunity
	3)	Concrete Sidewalk	\$17,460.00	0.14%	*Possible Small Business Opportunity

ITEM	TRADES/SUBTRADES		AMOUNT	PERCENT AGE	COMMENTS
	a)	FRP Chemical Tanks (20,000 gal tanks)	\$1,547,290.00	12.60%	
	b)	CPVC Pipe & Fittings w/ Viton O-Rings	\$110,470.00	0.90%	
	c)	Mechanical Processing Equipment	\$285,285.00	2.32%	
	d)	Spill Sump Pump	\$24,620.00	0.20%	
	e)	3 Ton - Bride Crane w/ Trolley & Hoist - 30' Span	\$64,900.00	0.53%	
	f)	7.5 Ton - Bride Crane w/ (2) Trolley & Hoist-62' Span	\$122,750.00	1.00%	
	g)	Chemical Metering Pump Skid	\$334,120.00	2.72%	
11)	HV.	AC - 238220			
	a)	2 - Air Conditioning Units, Water Cooled, 72.1 MBH, 2300 CFM (louvers, dampers & NACIO Room Fans)	\$135,470.00	1.10%	*Possible Small Business Opportunity
	b)	Cooling Tower	\$24,480.00	0.20%	*Possible Small Business Opportunity
	(c)	FRP Ductwork	\$544,590.00	4.43%	*Possible Small Business Opportunity
12)	Fle	ctrical - 238210			
			\$48,660.00	0.40%	*Possible Small Business Opportunity
	(a) (b)	General Electric & Lighting 600V Breakers, MCC, Panelboard, Heavy Duty Safety Switch, Variable Frequency Drives	\$610,660.00		
13)	Píu	mbing - 238220			
_	(a)	Potable Water & Emergency Shower	\$52,890.00	0.43%	*Possible Small Business Opportunity
	b)	Floor Drain	\$18,070.00		*Possible Small Business Opportunity
14)	+	e Protection System	\$86,916.00	0.71%	*Possible Small Business Opportunity
(1)		238910-238220 ework			
	(a)	16" Dia, Auger Cast Piles & appurt.	\$55,490.00	0.45%	
	b)	Spread Footing & Appurtenances	\$15,750.00	0.13%	
		Potable Water	\$6,010.00	0.05%	*Possible Small Business Opportunity
	<u> </u>				
2)	Inst	trumentation & Controls			
		Instrumentation, Calibration & Programming	\$174,250.00	1.42%	
3)	Arc	hitectural - 238160-238320-238290-238140			
	a)	Precast Roof Beams	\$40,060.00	0.33%	
	b)	Silicone Sprayed Waterproofing	\$4,080.00	0.03%	*Possible Small Business Opportunity
	c)	Paint - Concrete Surfaces	\$7,480.00	0.06%	*Possible Small Business Opportunity
	d)	Interior Partition Wall (CMU)	\$13,620.00	0.11%	*Possible Small Business Opportunity
	e)	Metal Grating	\$2,140.00	0.02%	
	f)	Membrane Roofing	\$16,210.00	0.13%	*Possible Small Business Opportunity
	g)	Doors (Frames, Doors & Panic Hardware)	\$10,300.00	0.08%	*Possible Small Business Opportunity
	h)	OH Doors Electric Operated	\$56,660.00	0.46%	*Possible Small Business Opportunity
	_	Louvers	\$2,260.00	0.02%	
	i)				
4)		uctural - 236210-236220-238110-238190			
4)		uctural - 236210-236220-238110-238190 Sidewalk	\$2,500.00	0.02%	*Possible Small Business Opportunity
4)	Stru		\$2,500.00 \$120,160.00		

ITEM	,	TRADES/SUBTRADES	AMOUNT	PERCENT AGE	COMMENTS
	(c)	Short Containment CIP Walls	\$89,240.00	0.73%	
	d)	Trough Walls	\$41,290.00	0.34%	
	e)	Roof Deck	\$59,550.00	0.48%	
	f)	CIP Exterior Walls	\$91,950.00	0.75%	
	g)	Metal Grating	\$17,300.00	0.14%	
	h)	Aluminum Stairs	\$13,900.00	0.11%	
5)	PROCESS MECHANICAL				
	a)	FRP - Chemical Tanks (2,500 Gal. Tanks)	\$40,280.00	0.33%	
	b)	Truck Fill	\$5,090.00	0.04%	
	c)	Mechanical Process Equipment	\$44,990.00	0.37%	
	d)	Tank - Feed Pump	\$22,640.00	0.18%	
	e)	Chemical Metering Pump Skid	\$133,649.00	1.09%	
	f)	Monorail Sys. w/ Trolley & Hoist (2 Ton)	\$27,250.00	0.22%	
6)	HVAC - 238220		· ·		
		Ductless Split Sys. (36.0 MBH, 770 cfm) - 2	\$16,540.00	0.13%	*Possible Small Business Opportunity
7)	Electri	cal - 238210			
	a)	Local Control Panel, Variable Frequency Drives & MCCs	\$123,600.00	1.01%	
	b)	Gen. Electric & Lighting	\$14,300.00	0.12%	*Possible Small Business Opportunity
8)	Plumb	ing - 238220			
	a)	Potable Water	\$16,610.00	0.14%	*Possible Small Business Opportunity
	b)	Floor Drain	\$6,830.00	0.06%	*Possible Small Business Opportunity
9)	Fire Protection - 238990				
	<u> </u>	Fire Protection System	\$59,540.00	0.48%	*Possible Small Business Opportunity
	-	Base Total	\$11,164,560.00	90.91%	
-	+ $-$		\$1,116,456.00	9.09%	
	+	Contingency Allowance (10% of Base Estimate)	\$12,281,016.00	100.00%	
		TOTAL AMOUNT	\$12,281,016.00	100.00%	

Small Business Development Signature:

Date:

*Trades/Sub-Trades identified for possible subcontracting opportunities by SBD CM

WASD is recommending **5.16**%